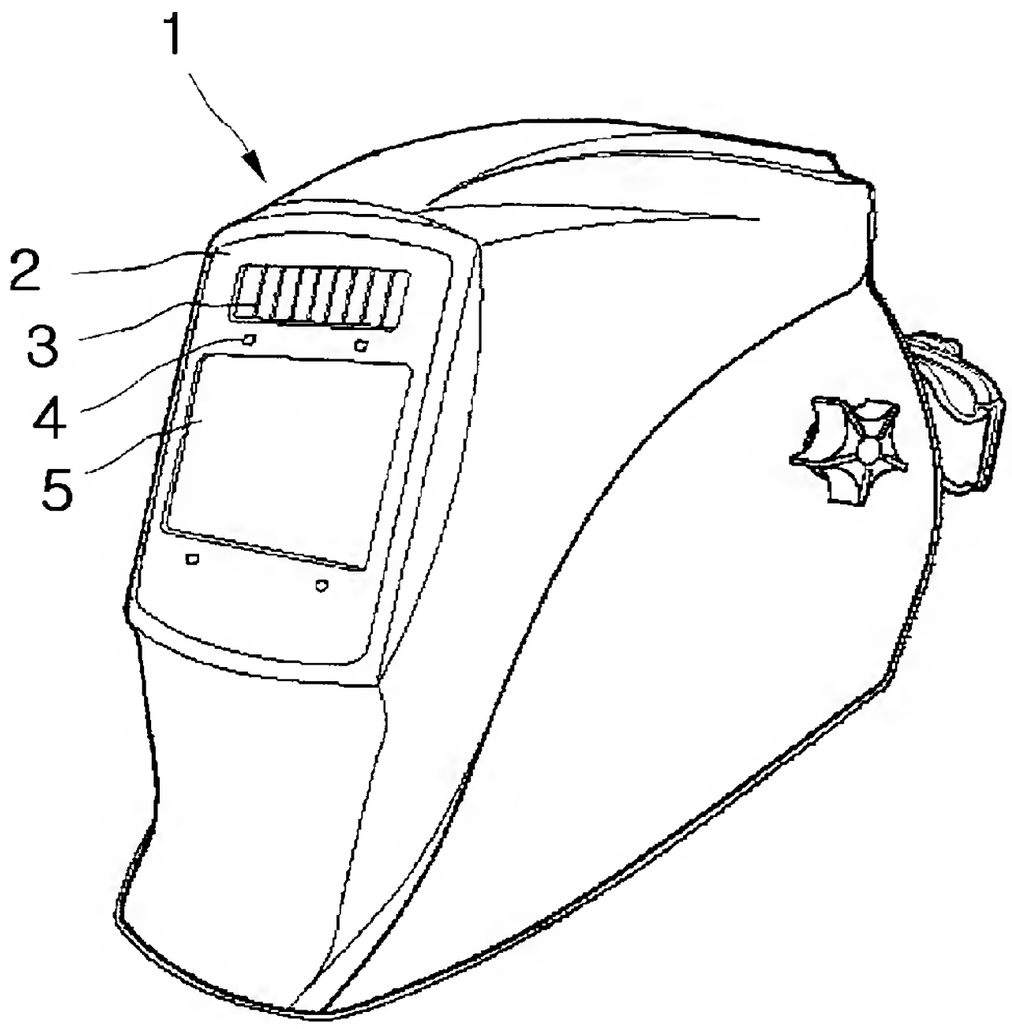
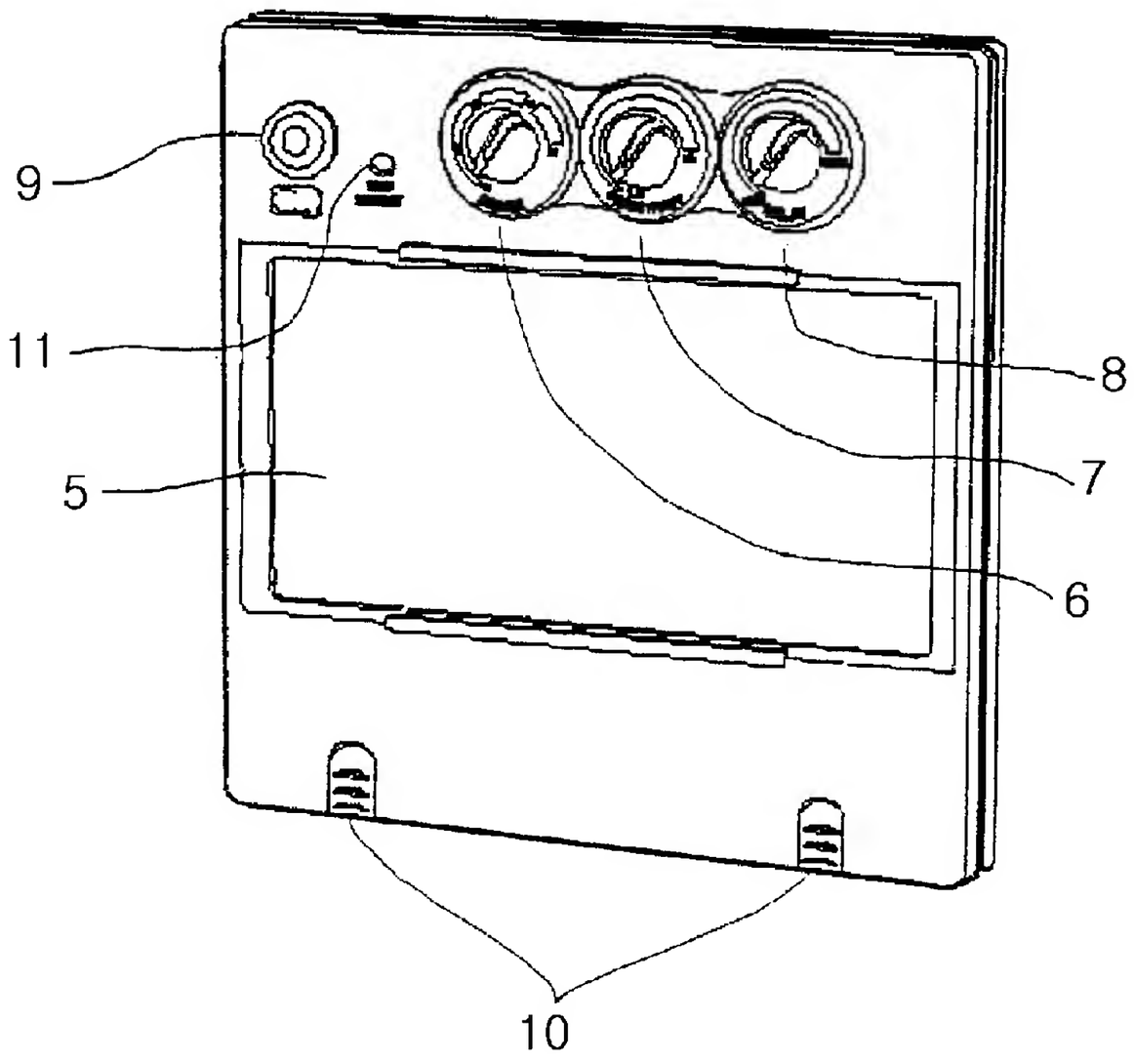
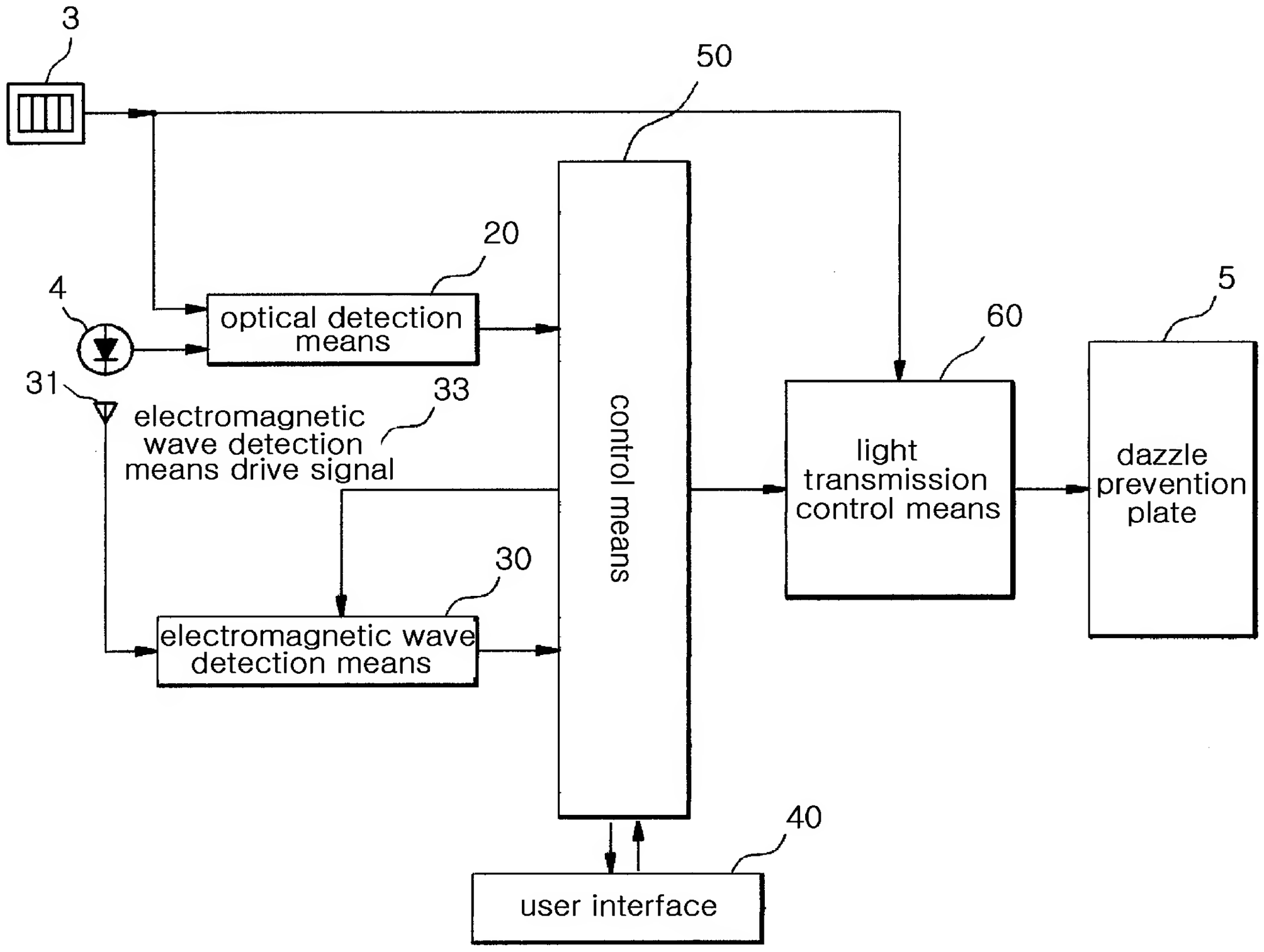
[Fig. 1]



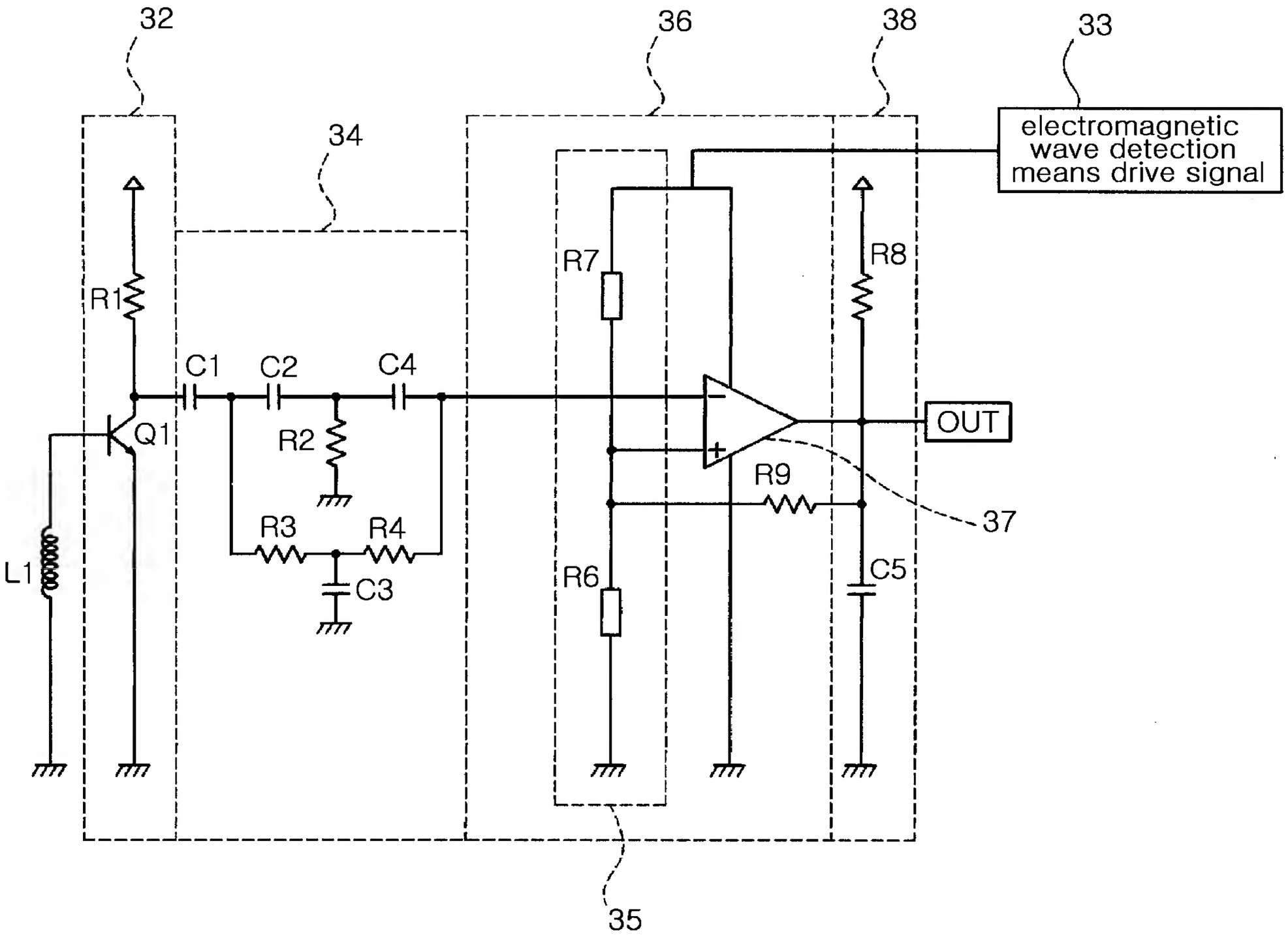
[Fig. 2]



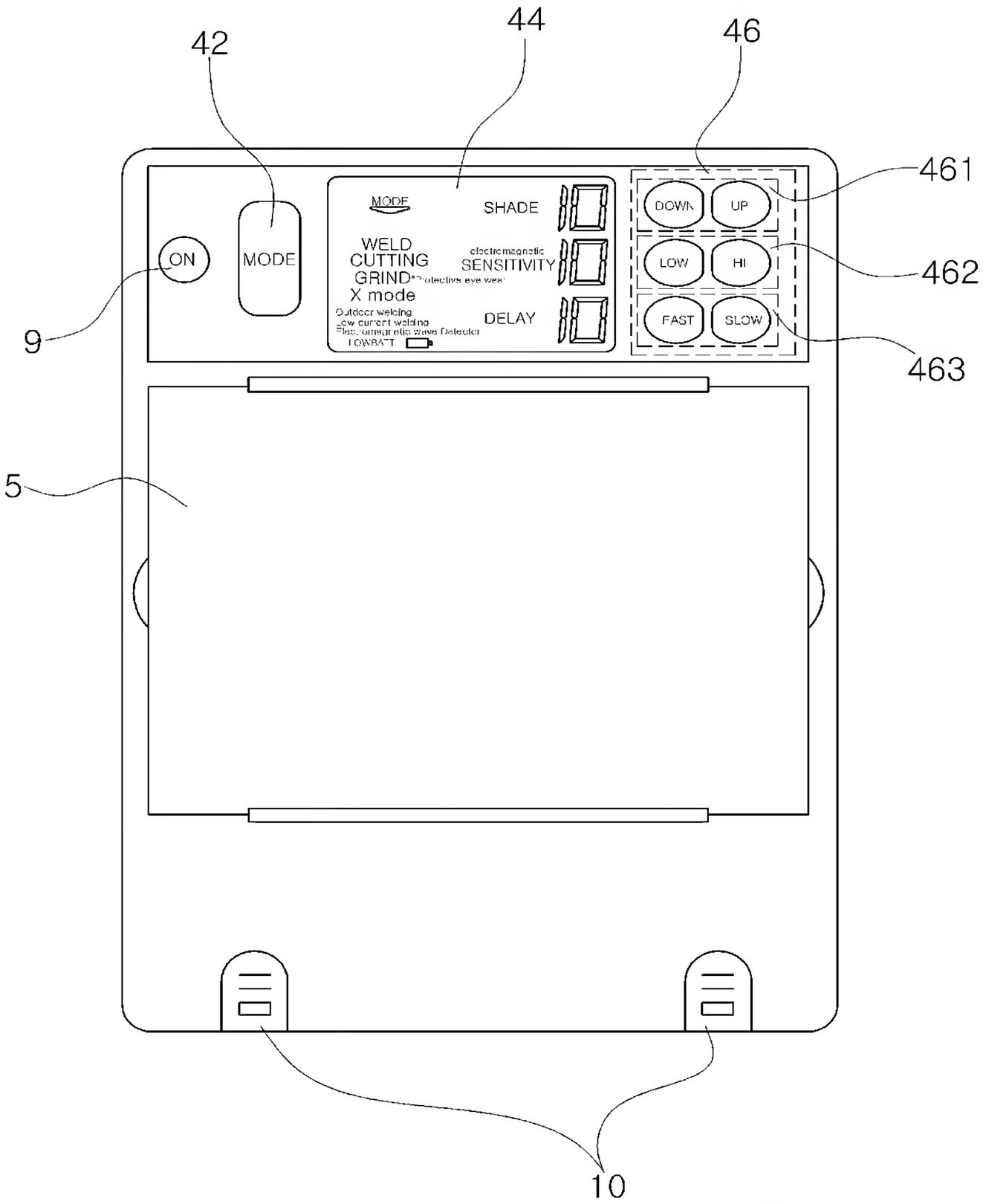
[Fig. 3]


3
50
20
4
optical detection means
5
60
31
33
electromagnetic wave detection means drive signal
control means
light transmission control means
dazzle prevention plate
30
electromagnetic wave detection means
40
user interface

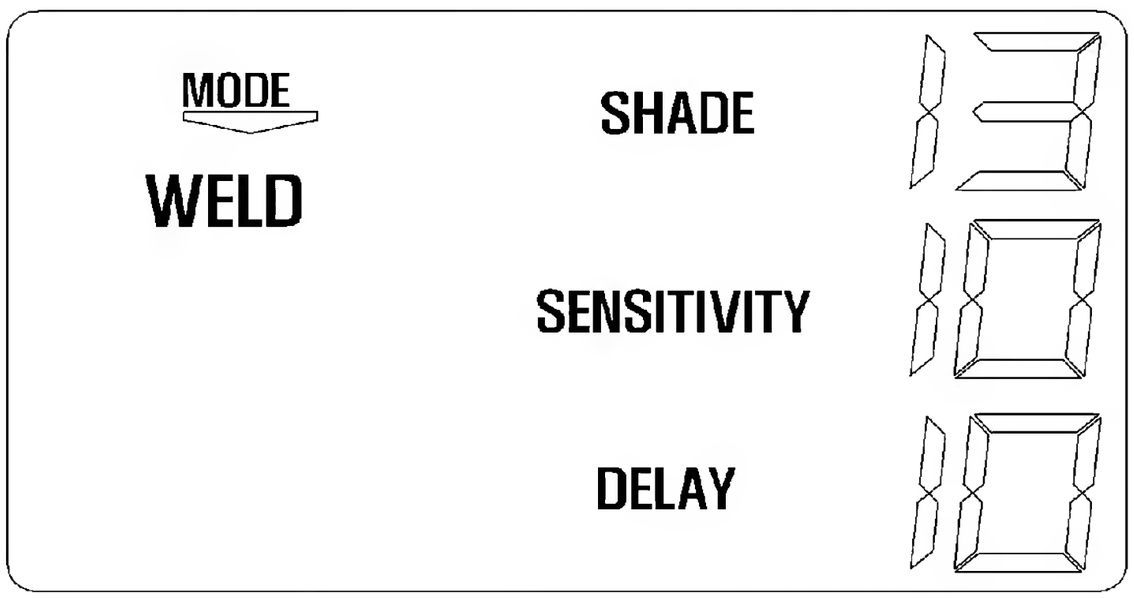
[Fig. 4]


32
36
38
33
34
electromagnetic wave detection means drive signal
R1
R7
R8
C1
C2
C4
Q1
R2
OUT
R9
37
R3
R4
L1
C3
R6
C5
35

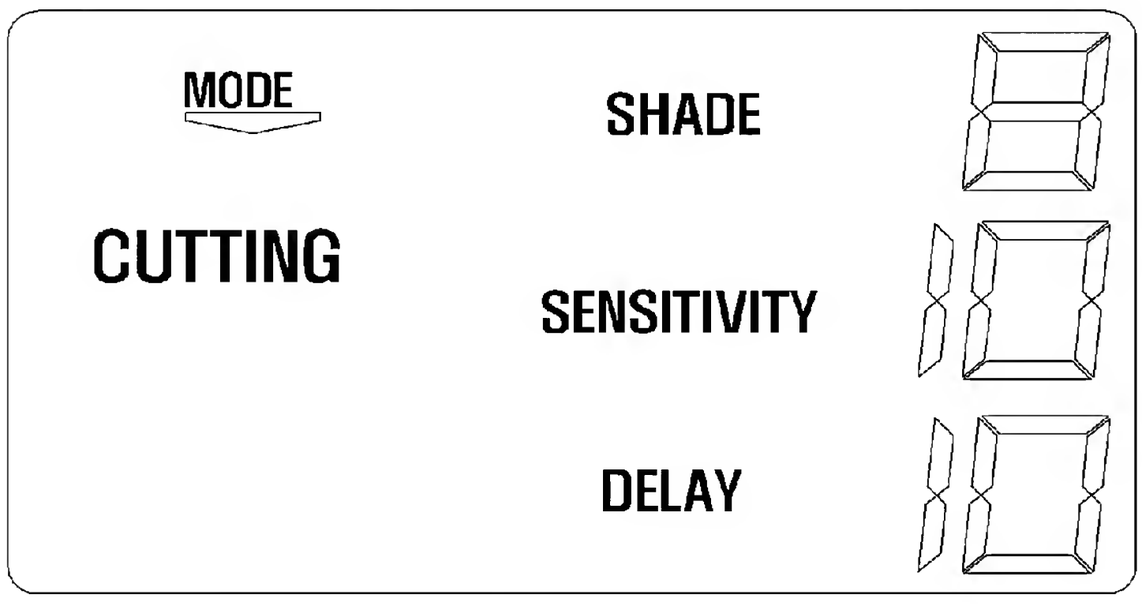
[Fig. 5]


42
44
46
461
462
463
9
5
10
ON
MODE
MODE
SHADE
WELD
CUTTING
GRIND
X mode
Outdoor welding
Low current welding
Electromagnetic wave Detector
LOWBATT
electromagnetic
SENSITIVITY
DELAY
DOWN
UP
LOW
HI
FAST
SLOW

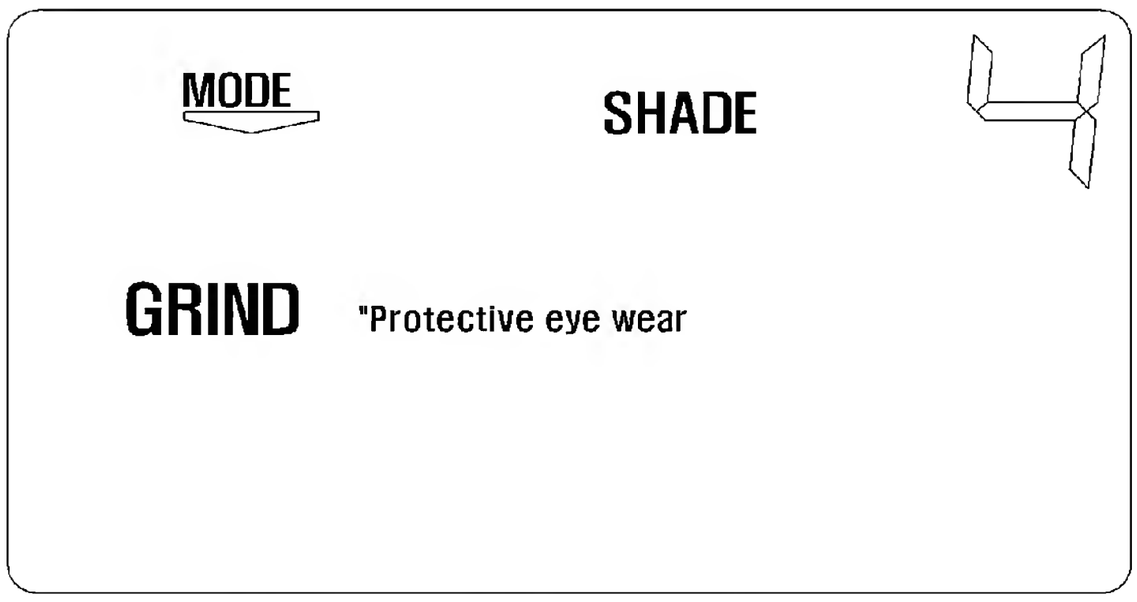
[Fig. 6]


MODE
WELD
SHADE
3
SENSITIVITY
10
DELAY
10

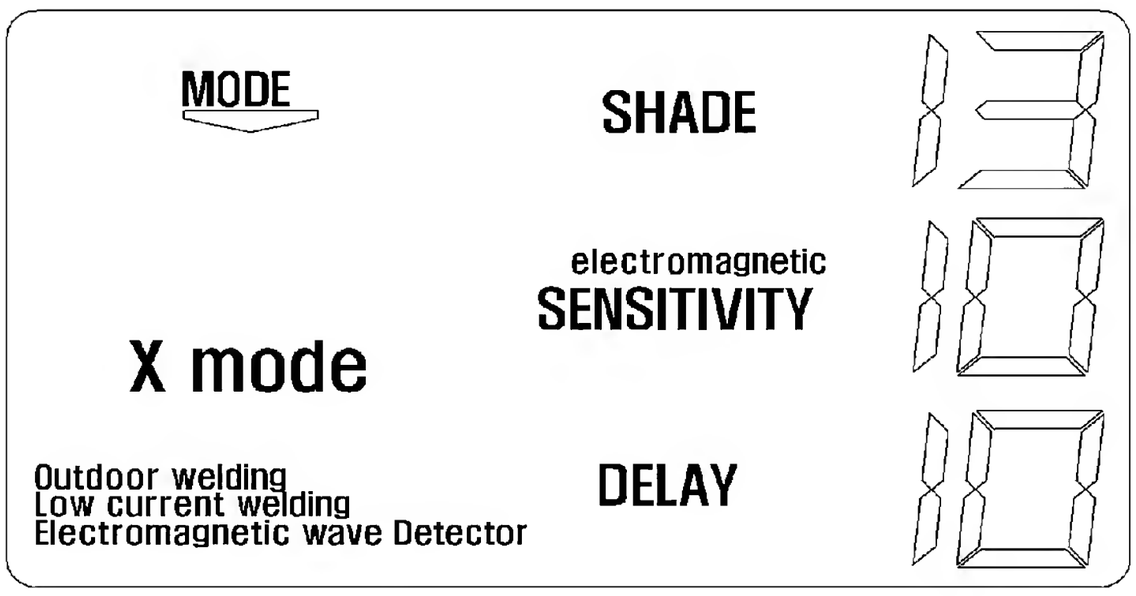
[Fig. 7]



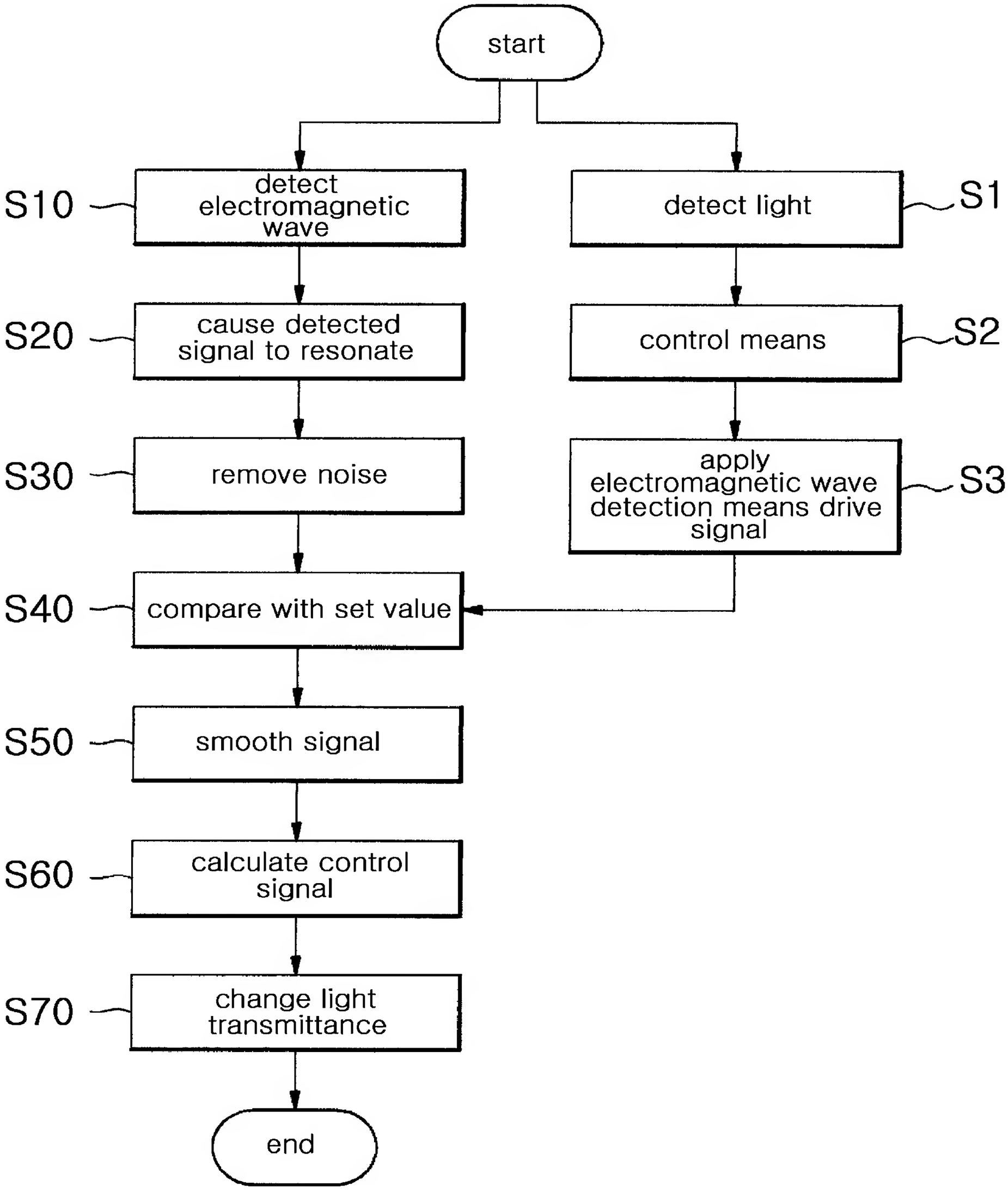
[Fig. 8]



[Fig. 9]



[Fig. 10]


start
S10
detect electromagnetic wave
detect light
S1
S20
cause detected signal to resonate
control means
S2
S30
remove noise
apply electromagnetic wave detection means drive signal
S3
S40
compare with set value
S50
smooth signal
S60
calculate control signal
S70
change light transmittance
end